Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method of graphically representing base data values and possible data values associated with a quantifiable image property, comprising:

displaying to a user in a graphical user interface (GUI) a base state line that represents a range of base data values;

displaying to a the user in the GUI a two-dimensional coordinate space skewed from the base state line in which the two dimensions are respectively parallel to and normal to the line; and

representing a range of possible data values in the two-dimensional coordinate space for each base data value by as distances along the normal dimension of the two-dimensional coordinate space from the corresponding base data value on the base state line.

2. (Currently amended) The method of claim 1 in which the base state line is displayed horizontally and the two-dimensional coordinate space is skewed from the horizontal direction.

3. (Currently amended) The method of claim 1 wherein the two-dimensional coordinate space comprises a polygon, two non-adjacent vertices of the polygon coinciding with the ends of the base state line in the two-dimensional coordinate space.

4. (Original) The method of claim 3 wherein the polygon comprises a parallelogram, the parallelogram comprising a first vertical side parallel to a second vertical side and a first skewed side parallel to a second skewed side.

5. (Original) The method of claim 4 wherein:

the possible data values represented by endpoints of the first vertical side and the second vertical side comprise the minimum and maximum of the range of possible data values;

the possible data values represented by points on the first skewed side comprise the minimum of the range of possible data values; and

the possible data values represented by points on the second skewed side comprise the maximum of the range of possible data values.

6. (Currently amended) The method of claim 1, further comprising displaying an active region in the GUI representing a parameter space of data values that may be assigned when the range of base data values is modified.

7. (Currently amended) A method of graphically representing base data values and possible data values associated with a quantifiable image property comprising:

displaying to a user in a graphical user interface (GUI) a horizontal line that represents a range of base data values, where each point on the line represents all parts of an image that have an image property value indicated by the position of the point on the line;

displaying to a the user in the GUI a two-dimensional, parallelogram-shaped coordinate space, in which the two dimensions are respectively parallel to and normal to the horizontal line, wherein the parallelogram shaped coordinate space comprises a first vertical side and a second vertical side, parallel to the normal dimension of the coordinate space, and a first skewed side and a second skewed side, skewed from the direction of the horizontal line; and

representing a range of possible data values by distances along the normal dimension of the coordinate space from corresponding current data values on the horizontal line, wherein the possible data values represented by endpoints of the first vertical side and the second vertical side comprise the minimum and maximum of the range of possible data values, and wherein the possible data values represented by points on the first skewed side comprise the minimum of the range of possible data values, and wherein the possible data values represented by points on the second skewed side comprise the maximum of the range of possible data values.

8. (Original) The method of claim 7 wherein the data values are used in a computer graphics display.

9. (Original) The method of claim 7 wherein the quantifiable image property comprises brightness.

10. (Original) The method of claim 7 wherein the quantifiable image property comprises contrast.

11. (Currently amended) A method of interactively transforming data values associated with a quantifiable image property, comprising:

    displaying to a user in a graphical user interface (GUI) a line that represents a range of base data values associated with a quantifiable image property;

    displaying to a the user in the GUI a two-dimensional coordinate space skewed from the line in which the two dimensions are respectively parallel to and normal to the line;

    representing a range of possible data values by distances along the normal dimension of the coordinate space from corresponding base data values on the line; and

    interactively providing displaying in the GUI a curve in the coordinate space that represents[,] a transformation of each base data value corresponding to the distance along the normal direction in the coordinate space from the curve to the a point on the line representing the base data value.

12. (Currently amended) The method of claim 11 wherein interactively providing a displaying in the GUI a curve in the coordinate space comprises:

    receiving from a the user an input selecting a point on the line;

    receiving from a the user an input moving the selected point to a new position in the coordinate space; and

    defining a curve in the coordinate space through the ends of the line and through the new position of the point.

13. (Original) The method of claim 11 wherein the tangent to the curve at the new position of the point is parallel to the line.

14. (Currently amended) The method of claim 11 further comprising:

    displaying to a the user in the GUI the base data value of the selected point; and

    displaying to a the user in the GUI the new data value of the point as it is dragged, the new data value being determined by the normal distance from the line to the point.

15. (Currently amended) The method of claim 11 wherein interactively ~~providing~~ displaying in the GUI a curve in the coordinate space comprises:

defining one or more nodes in the coordinate space; and

defining a curve in the coordinate space through the ends of the line and through the one or more nodes.

16. (Original) The method of claim 15 wherein the tangent to the curve at each node is parallel to the line.

17. (Currently amended) A method of graphically representing base data values and transformed data values, the data values being associated with a quantifiable image property, comprising:

displaying to a user in a graphical user interface (GUI) a line that represents a range of base data values;

displaying to ~~a~~ the user in the GUI a two-dimensional coordinate space skewed from the line in which the two dimensions are respectively parallel to and normal to the line;

representing transformed data values with a curve in the coordinate system; and

displaying in the GUI a line along the normal dimension of the coordinate system between an extremum of the curve and the line.

18. (Currently amended) A computer program residing on a computer-readable medium, comprising instructions operable to cause a computer to:

display to a user in a graphical user interface (GUI) a line that represents a range of base data values associated with a quantifiable image property;

display to ~~a~~ the user in the GUI a two-dimensional coordinate space skewed from the line in which the two dimensions are respectively parallel to and normal to the line; and

represent a range of possible data values in the two-dimensional coordinate space by as distances along the normal dimension of the coordinate space from corresponding base data values on the line.

19. (Currently amended) A computer program residing on a computer-readable medium, comprising instructions operable to cause a computer to:

    display to a user in a graphical user interface (GUI) a line that represents a range of current data values associated with a quantifiable image property;

    display to the user in the GUI a two-dimensional coordinate space skewed from the line in which the two dimensions are respectively parallel to and normal to the line;

    represent a possible range of data values in the two-dimensional coordinate space by as distances along the normal dimension of the coordinate space from corresponding current data values on the line; and

    provide interactively display in the GUI a curve in the coordinate space based on input from the user[,] that represents a change in each current data value corresponding to the distance along the normal dimension of the coordinate space from the curve to the point on the line representing the current data value.

20. (Currently amended) A computer program residing on a computer-readable medium, comprising instructions operable to cause a computer to:

    display to a user in a graphical user interface (GUI) a line that represents a range of old data values associated with a quantifiable image property;

    display to the user in the GUI a two-dimensional coordinate space skewed from the line in which the two dimensions are respectively parallel to and normal to the line;

    represent new data values with a curve in the coordinate system; and

    display a line in the GUI along the normal dimension of the coordinate system between an extremum of the curve and the line that shows a correspondence between an old data value on the line and a new data value indicated by the curve.

21. (Currently amended) A computer system for graphically representing base data values and possible data values associated with a quantifiable image property, comprising:

      a means for displaying to a user in a graphical user interface (GUI) a line that represents a range of base data values;

      a means for displaying to a the user in the GUI a two-dimensional coordinate space skewed from the line in which the two dimensions are respectively parallel to and normal to the line; and

      a means for representing a range of possible data values in the two-dimensional coordinate space by as distances along the normal dimension of the coordinate space from corresponding base data values on the line.

22. (Currently amended) A computer system for interactively transforming a graphical representation of data values associated with a quantifiable image property, comprising:

      a means for displaying to a user in a graphical user interface (GUI) a line that represents a range of base data values;

      a means for displaying to a the user in the GUI a two-dimensional coordinate space skewed from the line in which the two dimensions are respectively parallel to and normal to the line;

      a means for representing a range of possible data values in the two-dimensional coordinate space by as distances along the normal dimension of the coordinate space from corresponding base data values on the line; and

      a means for interactively providing displaying in the GUI a curve in the coordinate space[,] that represents a change in each current data value corresponding to the distance along the normal dimension of the coordinate space from the curve to the point on the line representing the current data value.

23. (Currently amended) A computer system for graphically representing old data values and new data values, the data values being associated with a quantifiable image property, comprising:

a means for displaying to a user in a graphical user interface (GUI) a line that represents a range of old data values;

a means for displaying to a the user in the GUI a two-dimensional coordinate space skewed from the line in which the two dimensions are respectively parallel to and normal to the line;

a means for representing new data values with a curve in the coordinate system; and

a means for displaying in the GUI a line along the normal dimension of the coordinate system between an extremum of the curve and the line.

24. (Currently amended) A computer system for interactively transforming a graphical representation of data values associated with a quantifiable image property, comprising:

a means for displaying to a user in a graphical user interface (GUI) a line that represents a range of current data values;

a means for displaying to a the user in the GUI a two-dimensional coordinate space skewed from the line in which the two dimensions are respectively parallel to and normal to the line;

a means for representing a possible range of data values in the two-dimensional coordinate space by as distances along the normal dimension of the coordinate space from corresponding current data values on the line; and

a means for interactively providing displaying in the GUI a curve in the coordinate space, that represents[,]a change in each current data value corresponding to the distance along the normal dimension of the coordinate space from the curve to the point on the line representing the current data value.

Applicant : Andrei M. Herasimchuck   Attorney's Docket No.: 07844-338001 / P312
Serial No. : 09/784, 931
Filed   : Febuary 15, 2001
Page   : 10 of 17

25. (Currently amended) A computer system for graphically representing old data values and new data values, the data values being associated with a quantifiable image property, comprising:

      a means for displaying to a user <u>in a graphical user interface (GUI)</u> a line that represents a range of old data values;

      a means for displaying to ~~a~~ <u>the</u> user <u>in the GUI</u> a two-dimensional coordinate space <u>skewed from the line</u> in which the two dimensions are respectively parallel to and normal to the line;

      a means for representing new data values with a curve in the coordinate system; and

      a means for displaying <u>in the GUI</u> a line along the normal dimension of the coordinate system between an extremum of the curve and the line.